

Puka-Puka or *Buka-buka*, indig. *R. Cunningham*.

New Zealand (Middle Island). Queen Charlotte's Sound.—1769, *Sir Jos. Banks*. (Northern Island.) River sides, Bay of Islands.—1826, *A. Cunningham*. Wangaroa.—1834, *R. Cunningham*.

Obs. Arbor 10—15 pedalis.

The natives call a letter or paper *Buka-Buka*, from the English word *book*, a quantity of paper bound together; so, where paper has been wanting to write a letter, the ample leaf of this plant has been used in New Zealand by Europeans, the white underside, even in its recent state, taking ink or diluted pigment extremely well; hence the modern name of the plant by the natives *Buka-Buka*!

464. *B. rotundifolia*, paniculis paucifloris foliis petiolatis ovato-subrotundis integerrimis subtus tomentosus. *Forst. Char. Gen. n. 2.*—*Cineraria rotundifolia. Forst. Prodr. n. 294. Willd. A. Rich. Fl. Nov. Zel. p. 254.*

New Zealand (Middle Island.) Dusky Bay.—1773, *G. Forster*.

465. *B. Rani*; paniculis ramosis multifloris terminalibus, foliis petiolatis lato-ellipticis acuminatis repando-serratis, supra glabris, subtus niveo-tomentosis, caule arboreo.

Rani, incol. *Rich. Cunningham*.

New Zealand (Northern Island). Banks of rivers, Bay of Islands, &c.—1834, *R. Cunningham*.

Obs. Arbor sæpe 3-orgyalis et ultra, ramosus; rami valde patentes. *Folia* alterna, elliptica, grosse serrata, subrepanda 2—4 pollicaria. *Petioli* patentes vix longitudine dimidii folii, supra canaliculati.

The plumose pappus, the short rays of the female florets, and the form of the achenium, appear sufficient to justify the separation of these plants from *Cineraria*, to which Forster referred them in his 'Prodromus', some years after he had published the genus *Brachyglottis*, which Persoon thinks ought perhaps (for the above reason) to be restored, although Forster's second view has been adopted by Willdenow. Lessing more recently, (1832) whose *Synopsis Compos.* appears now to be the text-book in this vast tribe of plants, considers them species of *Senecio*. He says, "Genus *Brachyglottis*, Forster's (pappo plumoso) *Jacobæa*, Thunb., generaque Cassiniana, *Grammarthion*, *Dorobæa*, *Obojæa* (*Senecionis* seu 2. L. radio revoluta), &c. non sunt separatu dignæ" ab *Senecione*.

[To be continued.]

BIBLIOGRAPHICAL NOTICES.

Illustrations of the Zoology of South Africa; consisting chiefly of Figures and Descriptions of the objects of Natural History collected during an Expedition into the interior of South Africa in the years 1834, 1835, and 1836, fitted out by the "Cape of Good Hope As-

sociation for exploring Central Africa." By Andrew Smith, M.D., Surgeon to the Forces and Director of the Expedition. 4to. Nos. I. II. Smith, Elder, and Co., London, 1838.

This is the work devoted to natural history alluded to in our notice of the 'Zoology of the Beagle' which has received the support of Government by a grant of money to defray the expenses of engraving the plates, &c., and being thus in a manner public property, we shall have little hesitation in expressing our opinion regarding it. It is a selection from the zoological collections brought home by the expedition which some years since penetrated into Central Africa under the care and superintendence of Dr. Smith, to whose persevering zeal in the pursuit of natural history we are mainly indebted for the whole plan and execution of the journey. That gentleman we believe spent some part of his early career as a student in the University of Edinburgh at the period when Dr. Barclay as a private lecturer gave a new impulse to natural science by undertaking a series of lectures on comparative anatomy. These lectures, novel at the time, and attended at first by many as being so, gave a different turn to the minds of young men entering the medical profession, and called on at an early period to go abroad. Many began to trace the beautiful gradations and analogies of structure in the frames of the singular animals inhabiting the different countries they visited. We can with confidence affirm that many an hour was thus spent which might otherwise have been thrown away; and the Barclayan Museum in the Hall of the College of Surgeons in Edinburgh will bear testimony of the assiduity with which many a pupil wrought to add something to the collection of his admired and respected teacher. Dr. Smith appears to have imbibed much of this zeal, and when entering on the duties of his profession in a foreign station soon gave evidence that he had not attended these lectures in vain—for not only was the direction of the Museum at Cape Town much improved, but several valuable and novel additions were made to it by his exertions; and the country, which had been explored by Sparrman and Barrow, and Le Vaillant, was still found to contain materials unknown and of vast interest to the zoologist. An active mind could not however rest within the boundaries of the colony, or even within the range of some of our enterprising modern travellers; and after several excursions of considerable extent, the journey we have alluded to was planned and executed, and the first portion of the result is now before us.

Had this work appeared ten or twelve years since, we and others would have held it as a beautiful production and scarcely to be ri-

valled. The numbers before us are no doubt beautiful, but we have lately seen so much of the luxury of illustration that we are perhaps spoiled and become too fastidious. The work is, comparatively speaking, moderate in price, and the figures will answer every purpose of the naturalist; but knowing at the same time what London can do in this department, and knowing also that a large sum of money (£1500)* has been voted by the Treasury for its use, we should have liked to have seen every part finished in the highest style of art. The plates, entirely lithographic, want boldness, and in some instances clearness, or decision in the outline and markings. Lithography suits some subjects beautifully, but in a work like that before us a combination of styles should be used wherever one was more suitable than another to the subject, and in the representations of most of the Mammalia engraving or etching produces the more natural effect. The backgrounds and stumps are extremely careless; witness the accompaniments to *Echinorhynchus obesus*, where it may be difficult to say what it is intended to represent. Diagrams of the teeth, &c., and other structures, should be introduced either on separate plates or as wood-cuts; the latter is the most convenient and does not entail more expense. The descriptive part is clear, distinct, and scientific, just what it should be; and we can only wish that "the more detailed account of the manners and habits" proposed to be given in an appendix, "hereafter to be published," had been given now.

Each number contains ten plates, published miscellaneously, but numbered so that each department may be arranged separately. In No. I. we have *Rhinoceros Keitloa*, Smith, a new species, and contrasted with the *R. bicornis*, Linn., to which it is somewhat allied. Dr. Smith considers that this animal does not now range higher than about 25° S. latitude, though some time back they must have frequented the vicinity of Latakoo; but from the evidence which was collected from the natives he is of opinion that at least another distinct and at present unknown species still remains to be discovered. 3. *Falco semitorquatus*, Smith. 4. *Chizærhis concolor*, Smith. Judging from the figure we should consider this bird more closely allied to *Corythæix* of Illiger; it was first met with at nearly 25° S. latitude; it perched on the highest branches of trees, flitting to and fro in search of fruits. 5. *Sterocles gutturalis*, Smith, discovered about 80 miles eastward of Latakoo. 6. *Otis ruficrista*, Smith.

* These instances of the partial patronage of science by the Treasury have, we find, caused some dissatisfaction, as being questionable on the score of favouritism, and of the disadvantage at which others have to appear, unaided, before the public; and not merely unaided, but subjected to excessive fiscal burthens, through the Post Office, the advertisement duty, the surrender of copies to privileged libraries, &c. &c.

7. *Sternotherus Linneotus*, Sm. 8. *Varanus albogularis*, Daud. 9. *Bucephalus viridis*, Sm. 10. *Echinorhynchus obesus*, Sm.; a species of shark, taken, though rarely, at the Cape of Good Hope; and it is worthy of notice, that at a late Meeting of the British Association Mr. Strickland exhibited a drawing of an undescribed shark, taken on the Yorkshire coast, very closely allied in appearance to this, and coming into the same genus. No. II. contains: 1. *Erinaceus frontalis*, Sm., a good figure of a hedgehog, obtained in the districts around old Latakoo. 2. *Herpestes badius*, Sm., from the same locality. 3. *Sciurus Cepapi*, Sm. 4. *Prionops Talacoma*, Sm. 5. *Crateropus Jardinii*, Sm. 6. *Euplectes taha*. 7. *Philatærus lepidus*, Sm. 8. *Merops Bullockioides*, Sm. 9. *Pterocles variegatus*, Burchell. 10. *Echidna incrassata*.

Archiv für Naturgeschichte. In Verbindung mit mehreren Gelehrten, herausgegeben von Dr. Ar. Fr. Aug. Wiegmann, Professor an der Friederich Wilhelms-Universität zu Berlin. Vierter Jahrgang. Zweites Heft. Berlin, 1838.

[Continued from Vol. I. p. 321.]

The present part contains several very interesting papers, which we can but briefly notice in this place. The first article, 'Remarks on the Caspian Sea,' by Prof. E. Eichwald of Wilna, has for its principal object to establish that the Caspian is independent of the Black Sea, a conclusion founded upon its different Fauna. Most of the fish found in the Caspian are fresh-water fish; there are however several peculiar species from genera which hitherto have been observed in salt water only. Several new species of fish are described by the author, of which we can merely mention the names. The most numerous tribe inhabiting this sea, are the *Cyprinidæ*, some of which are quite peculiar to it. The following are those described as new: *Cobitis caspia*, *Clupea caspia*, *C. pontica*, *Atherina caspia*, *A. pontica*. A new genus allied to the family of the *Gobiæ*, the diagnosis of which is as follows:—

Benthophilus. Caput depressum, dilatatum, alepidoti trunci instar verrucis aculeigeris undique obsitum, operculum branchiale aculeato-verrucosum, apertura branchialis exigua lateralis, pinnæ abdominales sub pectoralibus infixæ medio connatæ, pinna dorsi duplex, priore 3-radiata.

Benthophilus macrocephalus, *Gobius sulcatus*, *G. affinis*, *G. caspius*, *Syngnathus nigrolineatus* and *S. caspius*. Among the Amphibia we find mentioned as most remarkable, *Clemmys caspia* and *Tropidonotus hydrus*. *T. scutatus*, Pall., the author considers to be merely a black variety of *T. natrix*; the same is the case with *T. persa*, Pall. The sea